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10/051,931

01/18/2002

Mark J. Uniacke

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04/20/2006

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EXAMINER

BENGZON, GREG C

ART UNIT

PAPER NUMBER

2144

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,931

Applicant(s)

UNIACKE, MARK J.

Examiner

Greg Bengzon

Art Unit

2144

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This application has been examined. Claims 1-8, 11-14 are pending. Claims 9-10,15-21 have been cancelled.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/01/2006 has been entered.

Priority

The effective date of the subject matter in the claims in this application is January 18,2002.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8, 11-14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 11 recite a limitation for 'the model comprising an off-network pointer at a given one of the layers'. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter (i.e. 'carrier carrying software').

Claims 13-14 pertain to 'a carrier carrying software, which the Applicant Specifications (Page 13 Lines 20) define as a carrier wave or data signals embodied in a carrier wave. The Examiner notes that said carrier wave or data signals embodied in a carrier wave are non-statutory subject matter. The Examiner notes that absent some physical context, a signal per se is an abstract idea in much the same way that a mathematical algorithm without context is an abstract idea.

Allowable Subject Matter

Claims 5-8, 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taghadoss (US Patent 6052722) in view of Boer et al. (US Patent 5793765), hereinafter referred to as Boer .

Taghadoss discloses (re. Claims 1, 11) a method of managing a communication network comprising a plurality of ports, modelled according to a multiplex layer protocol, (Taghadoss - Figures 1-2) , and a network management system, the communication network being partitioned into a plurality of subnetworks. (Taghadoss - Column 1 Lines

35-65, Column 2 Lines 40-65) . Taghadoss disclosed (re. Claims 1,11) using the predetermined multiplex layer protocol to deduce and model higher layers of functions off the given subnetwork, for the given traffic services (Taghadoss- Column 6 Lines 10-15), based on lower-level network elements (Taghadoss – Column 4 Lines 35-40).

Taghadoss does not disclose (re. Claims 1,11) representing one of the ports, and representing a capability of the port for carrying, according to the multiplex layer protocol, traffic services exiting the given subnetwork at the given port.

Boer discloses a method for determining access points between subnetworks in a digital communications network. The network is partitioned into (abstractions of) subnetworks, with the status, in particular the transport capacity on a link to an adjacent network, of each subnetwork being indicated at so-called access points. (Figures 1-2) At these access points, properties of the network are grouped, i.e. network elements and their properties are represented in a functionally combined way at a higher abstraction level. By means of the combined representation of network elements it is possible to determine a suitable link in a simple manner, without the need of using, in selecting the link, detailed information relating to the individual network elements. As a result, a substantial simplification in the control can be achieved. The repeated partitioning provides a substantially recursive procedure which expediently provides for a simplified determination of sublinks.

Boer discloses generating, in respect of a said subnetwork, an off-network pointer exiting the subnetwork at one of said ports, whereby to establish a traffic carrying capability externally to the subnetwork, said generation performed by software in the system. (Boer - Column 2 Lines 30-65) Boer discloses that the pointer is first generated in one of said layers and functionality at other layers is generated in response thereto. (Boer - Column 3 Lines 20-45, Column 5 Lines 25-65) Boer disclosed determining those ports that represent valid termination points for trails, links and link connections in the subnetworks, whereby to generate trails interconnecting said connection termination points in different subnetworks. (Boer - Column 2 Lines 30-65, Column 8 Lines 30-65) Boer disclosed representing a capability of the port for carrying traffic services exiting the subnetwork at the given port (Boer – Column 10 Lines 50-60)

Taghadoss and Boer are analogous art because they present concepts and practices regarding management of digital communication networks. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the teachings of Boer regarding access points between networks into the method and system of Taghadoss. The combination of Boer into Taghadoss would enable the system of Taghadoss to 1) generate, in respect of a said subnetwork, an off-network pointer exiting the subnetwork at one of said ports, whereby to establish a traffic carrying capability externally to the subnetwork, and 2) determine those ports that represent valid termination points for trails, links and link connections in the subnetworks, whereby to generate trails interconnecting said connection termination

points in different subnetworks. The motivation for doing so would be, as Boer suggests, to allow for a network having central control to be coupled to a network having a distribute control. Selecting links in networks having a central control requires a type of control information which is different from that for networks having distributed control. The combination of Boer and Taghadoss offers the possibility of said networks to cooperate efficiently. (Boer - Column 9 Lines 45-50) Furthermore, the combination allows the access points to interrogate the respective subnetworks for the available transport capacity. (Boer - Column 10 Lines 45-60)

The combination of Taghadoss and Boer disclosed Claim 2 - a method according to Claim 1, wherein the pointer is first generated in one of said layers and functionality at other layers is generated in response thereto. (Boer - Column 3 Lines 20-45, Column 5 Lines 25-65)

The combination of Taghadoss and Boer disclosed Claim 3 - a method according to Claim 1, wherein the generation of said off-network pointer is performed by software. (Boer - Column 4 Lines 60-65)

The combination of Taghadoss and Boer disclosed Claim 4 - a method according to Claim 1, further comprising identifying incomplete trails within a said partition. (Taghadoss - Column 1 Lines 60-65, Column 4 Lines 35-65, Column 6 Lines 40-65)

The combination of Taghadoss and Boer disclosed (re. Claim 5) determining those ports that represent valid termination points for trails, links and link connections in the subnetworks, whereby to generate trails interconnecting said connection termination points in different subnetworks. (Boer - Column 2 Lines 30-65, Column 8 Lines 30-65)

The combination of Taghadoss and Boer disclosed Claim 6, Taghadoss does not disclose a method according to Claim 5, wherein the valid termination points for trails, links and link connections are first generated in one of said layers and functionality at other layers is generated in response thereto. (Boer - Column 2 Lines 30-65, Column 8 Lines 30-65)

The combination of Taghadoss and Boer disclosed Claim 7 - a method according to Claim 5, wherein the generation of said valid termination points is performed by software. (Boer - Column 2 Lines 30-65, Column 8 Lines 30-65)

The combination of Taghadoss and Boer disclosed Claim 8, Taghadoss discloses a method according to Claim 5, further comprising identifying incomplete trails within a said partition. (Taghadoss - Column 1 Lines 60-65, Column 4 Lines 35-65, Column 6 Lines 40-65)

With respect to Claim 11, the Applicant describes a network management system with the same limitations as Claim 1. Claim 11 is rejected on the same basis as Claim 1.

With respect to Claim 12, the Applicant describes a network management system with the same limitations as Claim 5. Claim 12 is rejected on the same basis as Claim 5.

With respect to Claims 13 , the Applicant describes a carrier carrying software for the method of Claim 1. Claim 13 is rejected on the same basis as Claim 1.

With respect to Claims 14 , the Applicant describes a carrier carrying software for the method of Claim 5. Claim 14 is rejected on the same basis as Claim 5.

Response to Arguments

Applicant's arguments filed 02/01/2006 have been fully considered but they are not persuasive.

The Applicant presents the following argument(s) [*in italics*]:

'Taghadoss...does not seem to show creating a trail, nor the idea of some ports being for internal use only. So there is no disclosure of a step of identifying which ports are valid for use with other sub-networks.'

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. The combination of Taghadoss and Boer determine those ports that represent valid termination points for trails, links and link connections in the subnetworks, and thus generate trails interconnecting said connection termination points in different subnetworks.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing

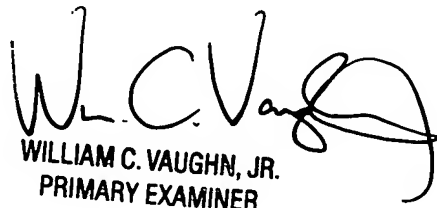
responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER